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WAR-TIME INDUSTRIAL EMPLOYMENT OF WOMEN IN THE UNITED STATES

Number of women employed.—Any estimate of the number of women drawn into industry in this country during the war must be largely a matter of speculation. It is known, however, that the number was small compared to the number of women who took up industrial pursuits in other countries. We do not even know the total number of women and girls now employed in gainful occupations, but judging from previous census figures it is probably over eleven million. Of these the number of female wage-earners sixteen years of age and over (excluding superintendents, managers, clerks, and other subordinate salaried employees) engaged in manufacturing in 1914, 1909, and 1904 was as follows:¹

| | | Percent increase ² |
|-----------|----------------|-------------------------------|
| 1914..... | 1,389,366..... | 7.7 |
| 1909..... | 1,290,389..... | 21.1 |
| 1904..... | 1,065,855..... | |

From these data it is reasonable to infer that the normal increase, without the influence of war conditions, would have brought the number of women in the manufacturing industry to somewhere between 1,500,000 and 1,800,000.

Miss Marie Obenauer, Chief Woman Examiner of the National War Labor Board, estimated in October, 1918, that there were 1,500,000 women in essential war industries at the time the armistice was signed. This estimate was based upon surveys in fifteen states, taken in connection with the assumed rate of increase and the known labor needs.³ We have no figures at all indicating how

¹ *Abstract of the Census of Manufactures*, I (1914), 433.

² *Ibid.*, p. 463. The increases for males are almost the same. For explanation of how the comparative figures for the different censuses are arrived at, see the same volume, pp. 434, 435.

³ *The Wage Earning Women in the Winning of the War*, Bulletin for the Press, issued April 14, 1918, by the Committee on Public Information.

many women entered industry for the first time during the war, or how many of those who did enter would normally have done so in peace time. Most of the women included in Miss Obenauer's estimates were employed in industries and processes in which women had been widely employed before the war. No statistics, of course, are available showing the substitution of women for men. Up to October, 1918, replacement was confined to comparatively few workers and groups of occupations.

The most conspicuous examples of new occupations, in which women did work which in pre-war time would have been assigned to men, are the (estimated) 100,000 women munitions workers (largely in machine shops), the large number in automobile factories, the few thousands in railroad shops, etc., and the few hundred on street railways. After the "work or fight" order of May, 1918, men of draft age could not secure deferred classification if engaged in certain occupations, including passenger-elevator operators, clerks in mercantile establishments, waiters, doormen, attendants, etc. There was therefore considerable shifting of women into these occupations, as well as a striking increase in the number of women engaged in office work.¹

Sources of supply.—Most of the women—estimates run as high as 95 per cent—who went into war industry came from other industries in which they had previously gained a livelihood and industrial experience. The war-time employment of women has been characterized by a shifting from the lower paid to the higher paid occupations, and from nonessential industries, rather than by any large accession of women who would not normally have come into industry in any event. The three important non-industrial sources were doubtless (1) domestic service, from which came considerable numbers for the factories; (2) teachers, 100,000 of whom are said to have left the low pay of the schoolroom for clerical and munitions works; (3) wives and mothers of soldiers.

That the supply of women industrial workers in essential industries has been largely recruited from women previously employed is indicated by specific inquiry in individual plants. In a study

¹ Cf. Hobbs, "Wartime Employment of Women," *American Labor Legislation Review*, December, 1918, pp. 334-35.

of the women workers in the Philadelphia Naval Aircraft Factory, for instance, it was found that the 221 women in the plant July 18, 1918, came from 90 different occupations, including inspectors, "operators," saleswomen, teachers, "sanding talking machines," power-machine operators, and drill-press operators. Most of the remaining occupations, represented by one to six each, were from manufacturing industries.¹

Methods of recruiting.—Methods of recruiting never became systematized in this country, nor did publicity for the securing of women workers reach anything like the same extent it did in England and France. Munitions plants here had been recruiting large numbers of women before we entered the war, with only such regulations as the various state laws, indifferently enforced in some instances, provided, and this situation continued after our entry into the war. Many firms found it desirable to recruit their new women workers as largely as possible from the families of their men employees.² This method is said to be by far the most effective from the point of view of shop management, but precarious from the point of view of supply.³ In general, up to October, 1918, industrial plants seem to have found no great difficulty in obtaining a fairly adequate supply of woman labor.

English experience in recruiting and training women covered the four years of the war and involved an increase of about 1,500,000 in the number of women employed. This experience was thoroughly canvassed by labor specialists in this country and much haphazard and unorganized publicity given to it. No serious governmental effort was made, however, to get it systematically before employers, nor did anyone seem seriously to contemplate the need of publicity for the recruiting of women, until the third draft threatened to call every available man under forty-five into the army. There is much evidence in the technical and trade

¹ Council of National Defense, Committee on Women in Industry, *Women Workers in the Philadelphia Naval Aircraft Factory*, p. 24. See also National Industrial Conference Board, *Wartime Employment of Women in the Metal Trades*, 1918, pp. 70-72.

² Turner, "Women in Mechanical Trades in the United States," *Monthly Labor Review*, September, 1918, p. 211.

³ Cleveland Chamber of Commerce, *Substitution of Woman for Man Power in Industry*, 1918, p. 17.

journals, however, that employment experts in our industrial establishments studied English experience, and that intelligent progress in recruiting, selecting, and training was based upon it, even in the absence of government advice and direction.¹ But we did not, in this country, begin to approach the co-ordination and regulation which the English achieved. It took them two years to do so. English experience, however, revealed the principles and machinery requisite for an effective recruiting policy for woman labor. These included (1) central control, to put labor where it was needed most, (2) community labor boards or committees, (3) government labor exchanges or employment offices, (4) publicity, (5) regulation—selection, medical examination, oversight of housing accommodations, arrangements for transportation, etc., (6) official standards, legally enforced, for working conditions, hours, wages, etc. By October, 1918, our own government, through the United States Employment Service and other agencies, was headed toward some such program.

The United States Employment Service began to take a hand in the placement of women in September, 1918, by which time the service was getting under way. There is no evidence, however, that it placed any considerable number of women, though had the war continued it would have become an indispensable agency to this end.² Early in September the Employment Service issued two general orders³ outlining a program for intelligent direction of the introduction of women into new fields of war industry. A noteworthy feature of this program was the addition of two women, with full voting powers, to each community labor board, one representing women workers and the other industrial management. When employers made application for women for occupations not hitherto customarily undertaken by women, the local employment office was to refer the application to the community labor board of the district for approval. Approval could be given with limitations

¹ Cf. for example, Porter, "Detroit's Plan for Recruiting Women for Industries," *Industrial Management*, August, 1917, pp. 655-59.

² In October, 1918, the Employment Service placed 66,000 women. *U.S. Employment Service Bulletin*, December 10, 1918, p. 10.

³ *General Order B-7 and B-8*. The full text is given in the *U.S. Employment Service Bulletin*, September 17, 1918, p. 314.

as to wages and working conditions. The functions of the community board thus involved decision as to the following matters: (1) propriety of the proposed kind of work for women, (2) whether working conditions in the particular place and under existing conditions were satisfactory, (3) modifications necessary before employment of women could be sanctioned, (4) what age limitations, if any, should be enforced.

General order B-8 also provided that doubtful cases should be referred to the general director of the Employment Service who was to refer the matter to the Women in Industry Service of the Department of Labor. The decision of that Service, when approved by the Secretary of Labor, was to be binding upon the Employment Service and the community labor board. The motive back of this provision was, of course, to protect standards of working conditions, wages, etc. The provision for reference to the central office grew out of the fact that a large amount of information from foreign and domestic experience had been collected at Washington and was available only there. One can only guess, in view of the usual slowness with which departmental red tape unwinds, that the employers, had wholesale substitution of women become necessary, would have employed the women without waiting for the community board, the Director General, the Director of the Women in Industry Service, and the Secretary of Labor to review the case.

In October the Employment Service announced a campaign to replace men by women in every position a woman could fill, and early in November the Department of Labor announced that unoccupied women ought to seek regular positions in war industry.

The Bureau of Labor Statistics gathered a large mass of data, including several hundred photographs, relating to the work of women in war industries in England. This material was practically unavailable to the general public, however, as the Department of Labor did not move with great decision or rapidity and did not start any serious campaign to get more women into industry. The Women in Industry Service, like the Employment Service, did not get under way until August, and then with very inadequate appropriation. Moreover it seemed to approach its duties more with the idea that its function was primarily to protect and develop

standards of women's employment and only secondarily and indirectly (through better standards) to aid in the necessary speeding up of war production. This attitude doubtless had its origin, in part, in English experience, where in the earlier months of the war women had been overworked to the point of fatigue-exhaustion, and where in consequence the government had taken stringent measures to protect women workers and at the same time secure as many as possible for essential industries. In so far as standards to protect health and efficiency were necessary to the continuation of maximum output in war time, the position taken by the Women in Industry Service was the proper one. It would have been very easy, however, to overstep this limit, with an eye more to ideal peace-time standards than to the immediate pressing needs of the nation for accelerated production.

Processes and operations.—While women have been employed in a variety of operations, and while even in this country they have found many new opportunities in skilled trades, the vast majority have been employed in unskilled or semiskilled processes of a repetitive nature. Women have not in the past made their way in any considerable numbers into the recognized "trades" and hence lack training and experience, and war demands did not reach the point of necessitating an extensive substitution of women for men. Other causes why women have been confined to unskilled and semiskilled jobs may no doubt be found in certain artificial obstructions. Employers in many instances have been opposed either actively or passively—actively where they object to introducing women because of the greater care necessary in management and working conditions, passively where they "have to be shown" that women can work as well as men. The opposition of men employees, also, while held in abeyance during the war, except in isolated cases like the notorious action of the organized street-railway employees of Cleveland, was potentially present. Foremen also not infrequently object to women, as English experience has shown. The practice of up-grading men already on the job, putting them into places requiring more skill and judgment, and filling the old places by women, helps further to explain the comparative scarcity of women in skilled trades.

A list of the actual operations performed by women would fill many pages. Generally speaking the new operations are to be found in the metal industries. The operations performed by women in the United States arsenals may be taken as typical. They include assembling, inspecting, store-keeping and issuing, operating five- and ten-ton automatic electric cranes, armature winding, shaping, grinding, milling, operating saws, lathes, drill presses, punch presses, automatic and hand screw machines, soldering, oxyacetylene and electric welding, galvanizing and electroplating, polishing and buffing, painting, checking and loading, operating engraving machines, driving trucks, operating photostat machines, running elevators, etc. Much the same list would be found in the large automobile factories, which introduced women in large numbers, and in munitions plants of all kinds.¹

Perhaps the most conspicuous case of increased employment of women was that on the railroads. On January 1, 1918, there were 60,555 women engaged in railroad work; by October 1 the number had increased to 101,000. Of these, however, 73,285 were engaged in office work and 2,796 in personal service (dining-rooms, etc.), leaving only about one-fourth of the total for the manual and industrial phases of railroad work. Shopwork engaged 5,091; cleaning cars, etc., 5,555; round houses 1,365; warehouse and dock (including trucking) 1,461.²

It is evident that no definitive objective judgment as to the scope of the possible employment of women in processes requiring breadth and high degree of skill can be based on war-time experience. English experience indicates that women, under equal incentive and opportunity, are probably as capable as men in

¹ For a comprehensive list of machines operated successfully by women see Lynch, "Women's Work in the Iron, Steel, and Metal Industries," *Iron Trade Review*, January 17, 1918, p. 206.

² "Work of Women's Service Section, United States Railroad Administration," *Monthly Labor Review*, March, 1919, pp. 209-12. For full statistics of occupational distribution see the table, p. 209. For further matter concerning processes see: National Industrial Conference Board, *op. cit.*, pp. 1-3, 8-29; Turner, "Women in Mechanical Trades in the United States," *Monthly Labor Review*, September, 1918, pp. 206-15; Goldmark, "Women in the Railroad Service," *Proceedings of the Academy of Political Science in the City of New York*, February, 1919, pp. 151-56; Council of National Defense, *op. cit.*, October, 1918, pp. 26-36.

developing all-around mechanical capacity, but in the main the war has furnished less evidence than one might suppose, in view of the vast amount that has been written on the subject. The necessity for immediate increase of output made it essential to give women specialized intensive training for particular jobs rather than to develop them into general mechanics. In this fact is to be found the limitation on what we have learned about woman's industrial capacity.¹

Efficiency and output.—To judge of the relative efficiency of women and men is extremely difficult. Employers' views are conflicting and are not worth much except in the relatively few cases where exact records of output of men and women on the same work under like conditions have been kept. An official canvass would probably discover a considerable amount of data of this character. In the main, however, American industrial management is of such a slapdash character that the vast majority of firms fail to appreciate the value of output records. Without them no scientific judgment can be made.

Opinions are, however, of interest, and taken in the mass perhaps afford a basis for tentative judgment. It is significant that the number of employers who are willing to say that women are less efficient than men is relatively small. The best available information as to opinions is afforded by an investigation undertaken by the Committee on Industrial Welfare of the Cleveland Chamber of Commerce in the summer of 1918.² In the metal industries no employer was found who would say that women are less productive than men; 24 per cent regarded women as less prompt and less regular in attendance than men, and 20 per cent said women could not so easily be transferred from one process to another as men. Opinions in the clothing and miscellaneous industries were less favorable. On the whole, however, the distribution of opinion may be taken as extremely favorable to women. A tabulation of the opinions, by percentage distribution, follows. While the investigation was evidently comprehensive, unfortunately no information is given as to the number of firms covered; nor is

¹ National Industrial Conference Board, *op. cit.*, p. 37.

² *A Report on the Problem of the Substitution of Woman for Man Power in Industry.*

any definition given of the meaning of "production"—whether it means absolute physical productivity or productivity relative to wages paid. Indications are that it means the former.

Naturally the problem of the kinds of work suitable for women has been brought to the fore by war demands, and especially has

TABLE I

SUMMARY OF OPINIONS OF CLEVELAND EMPLOYMENT MANAGERS AS TO THE
RELATIVE EFFICIENCY OF MEN AND WOMEN

| | Percentage in Metal Industries | Percentage in Clothing Industries | Percentage in Miscellaneous Industries |
|--|--------------------------------------|---|--|
| <i>Production:</i> | | | |
| Women more productive than men..... | 64 | 20 | 38* |
| Women less productive than men..... | 0 | 20 | 0 |
| Women equal to men..... | 24 | 40 | 52 |
| Managers in doubt..... | 12 | 20 | 10 |
| <i>Attendance:</i> | | | |
| Women more regular than men..... | 28 | 0 | 10 |
| Women less regular than men..... | 24 | 60 | 40 |
| Women equal to men..... | 48 | 40 | 40 |
| Managers in doubt..... | | | 10 |
| <i>Tardiness:</i> | | | |
| Women more prompt than men..... | 43 | 0 | 30 |
| Women less prompt than men..... | 24 | 50 | 30 |
| Women equal to men..... | 33 | 50 | 40 |
| <i>Ease of transference from one process to another:</i> | | | |
| Women more easily transferred..... | 35 | 10 | 12 |
| Women less easily transferred..... | 20 | 20 | 38 |
| Women equal to men..... | 15 | 50 | 12 |
| Managers in doubt..... | 30 | 20 | 38 |
| <i>Length of service:</i> | | | |
| Women stay longer than men..... | | 33 | 23 |
| Women stay shorter period than men..... | | 33 | 54 |
| Women stay equal length of time as men..... | | 34 | 23 |

there been interest in the question of woman's capacity for heavy work. In general, it would seem that employers in this country have avoided placing women at jobs requiring great physical strength. This is only elementary common sense applied to selection and placing. As a matter of fact, however, the heaviness of work on which women can safely and effectively be employed

is a question on which scientific investigation is badly needed. Even the laws on the subject reflect the diversity of opinion. England permits women war workers to lift weights up to sixty pounds, France up to fifty-five pounds.¹ In this country most of the states place no legal limits at all. The Woman in Industry Service, however, sets the limit at twenty-five pounds. This is, of course, in no way mandatory.²

Social workers, and specialists in the study of women in industry, as well as many medical men, have fought hard to reduce the demands upon women's physical strength. On the other hand there are still some persons who feel that women are being hedged about by so many restrictions that their activities are unnecessarily limited. The contention is made that women in their homes perform much heavy work and that the work of European peasant women proves that women can without harm be trained to heavy labor.³

Against this it is argued that household tasks, however heavy, are not comparable to the continuous constantly supervised work of the factory, and further, that the ill results of heavy munitions work in France and Great Britain are likely to appear in later years, if not now. Medical opinion bears strongly against heavy work, but much of it is only opinion, based largely on a professional tradition and unsupported by concrete evidence. Experience and a proper consideration of certain influences which

¹ *Monthly Labor Review*, September, 1918, p. 217.

² "Peace Time Standards for Women in Industry," *U.S. Employment Service Bulletin*, December 17, 1918, p. 4. In the little pamphlet, under the same title, published by the Women in Industry Service for general distribution, and dated December 12, 1918, the definite limit is not given. It is merely stated that "repeated lifting of heavy weight or other abnormally fatiguing motions" should not be required. The Wisconsin Industrial Commission rules that even the maximum of twenty-five pounds should be lowered "if women are required to lift such a weight often or carry it any distance." See *Factory Equipment, Housekeeping, and Supervision*, a handbook for employers of women, September, 1918, p. 7.

³ The principal lady factory inspector, in England, permits herself to wonder "whether some of the surprise and admiration expressed in many quarters over new proofs of woman's physical capacity and endurance is not partly attributable to lack of knowledge or appreciation of the very heavy and strenuous nature of much of the normal pre-war work of women, domestic and industrial." See *Report of the Chief Inspector of Factories for 1916*, Cd. 8570 (1917), p. 5.

have long had an undesirable repressive effect upon woman may develop a modification of the generally accepted view.¹

With regard both to physical and to mental adaptability to industry the evidence thus far adduced from war experience is unsatisfactory from a scientific point of view, especially in this country. Adaptability and capacity can scarcely be judged apart from production; and comparative records for men and women are both inadequate and contradictory. The reasons for this fact are easy to locate. (1) The recency with which women have entered many trades makes it unfair to compare them with men. Greater experience and stability must be waited for. (2) Output records are lacking, as mentioned above. (3) There has been a lack of persons properly qualified to make time and motion studies. England has secured more satisfactory data in this regard than we have. (4) The pressing demand for production made such studies difficult in war time. (5) Conditions are rarely the same for men and women. The type of woman drawn into the factories is an element in the situation. Practically untrained women are often judged in relation to men of experience and skill. There are also differences involved in incentive. The ordinary impulse of the new worker to make good, the patriotic motive, and the general speeded-up psychology of war time would tend to influence the output of women favorably. Restriction of output by men workers, where present, either tacitly, or under long-standing union rules, as in England, would also make the record read more highly in favor of the women.² (6) Changes in shop organization and management, new machinery, re-routing, splitting up of jobs, etc., rendered necessary or advisable by the introduction of women, affect the comparison. While it is generally asserted that women take more kindly to repetition work than do men, the increased output which in many instances has followed the substitution of

¹ See, for instance, Mosher and Martin, "The Muscular Strength of College Women," *Journal of the American Medical Association*, January 19, 1918, pp. 140-42.

² See National Industrial Conference Board, *Wartime Employment of Women in the Metal Trades*, pp. 35, 36. "Yet in many types of light work," says this report, "women apparently are capable of bettering men's record, even when the men do their best." This is especially true where deftness and dexterity in handling small parts are required.

women for men is due in part, especially in England, to improvement of war-time machines, tools, time- and labor-saving appliances, and organization.¹ On the other hand, even where men and foremen have not been antagonistic, the failure of foremen and managers to understand woman's viewpoint and special needs has frequently placed women at a distinct disadvantage. Mrs. Clara M. Tead, of the Ordnance Department, from whom many valuable suggestions have been obtained, especially stresses the fact, made clear by her experience, that these complex factors make it dangerous to accept the opinion of any employer as to the efficiency of women workers.

We can for the present probably do no better than to accept the conclusion of Mr. A. W. Kirkaldy:

In any case, it is clear that women in industry are capable of doing successfully not merely such unskilled work in laboring as their physical strength can compass, nor merely work of a repetitive or routine nature, but work of a much higher order, where they have training for it. And it is clear that, as they gain more experience, the limit of their industrial usefulness has not yet been reached.²

Training.—Where any attention whatever has been paid to training, by far the greater numbers of workers, both men and women, have been trained in the shop, not by specially prepared instructors, but by foremen or journeymen whose attention is divided between their own work and that of training the recruits.³

¹ *Commerce Reports*, March 27, 1919, p. 1549.

² *Industry and Finance*, 1917, p. 41. The most comprehensive study of the question yet published in this country is that of the National Industrial Conference Board, *Wartime Employment of Women in the Metal Industries* (July, 1918). This deals with information obtained from 131 establishments employing 334,878 men and 49,831 women. A summary comparison of output and wages is given in a table, pp. 8-29. The report has the advantage that it deals with comparatively large numbers, an advantage somewhat offset, however, by the disadvantage inherent in the questionnaire method, which the investigation relied upon for this information. This method is at best unreliable. See also New York State Department of Labor, *The Industrial Replacement of Men by Women*, March, 1919.

³ Of the 131 concerns employing women and investigated by the National Industrial Conference Board, only eleven, with 14,380 women on their pay-rolls, had special training departments. (*Wartime Employment of Women in the Metal Trades*, p. 45.) Of the 117 plants included in the study made by the New York State Industrial Commission, only seven had training schools. (*Industrial Replacement of Men by Women*, p. 18.)

Three methods of training have been utilized by private industry: (1) training in the shop, as just mentioned, either with or without the aid of instructors especially appointed for the purpose, (2) vestibule schools, or, as they are sometimes called in England, training bays, (3) co-operative schools. The latter are by no means common. They are ordinarily conducted in some public building—school or Y.M.C.A.—and are financed by groups of firms. Sometimes also private firms and public agencies co-operate both in financing and in management.¹

The vestibule school generally consists of a part of a factory set off for use of new workers. There, under competent instructors, they are given lessons in machine-operating. Sometimes the training is a matter of only a few days, sometimes of weeks. As a general rule during war time the training was limited to a single operation. On the other hand, where women were to be trained for supervisory work, they were transferred to new machines as rapidly as they could master the operations, and in that way became familiar with all the types of work on which women were employed.

While the movement for the establishment of training departments is still in its infancy, and the relative merits of the different types of organization for training are not definitely settled, the trend of experience indicates the vestibule school as the most effective and economical agency for intensive training, especially of women. English experience indicates that it is difficult to start women in the same shop with men unless the latter are in sympathy. Another argument for vestibule-training is that women and girls are under unnecessarily high nervous tension when thrown at once into factory noise and confusion, and that much spoiled work results. The divided attention of the foreman under such conditions is a great drawback. Nevertheless, industrial managers are to be found who maintain that better results are obtained when the untrained women are placed directly in the shop, especially if they are there taught by special instructors. Other managers hold that vestibule-training saves the time of the foremen and

¹ Aside from these, of course, there have been many schools and intensive courses promoted by educational authorities, local, state, and national, by the Y.M.C.A., etc. See, for illustration, Burdick, "Training of Girls and Women for Emergency War Work," *Vocational Summary*, August, 1918, p. 9.

workers, who are otherwise constantly called upon to stop their machines and help the green hand.¹ In general the belief seems extensive that women make better instructors of women than do men.

Government agencies more or less concerned in the training of women included the Training and Dilution Service of the Department of Labor, the Railroad Administration, the Council of National Defense, and the Federal Board of Vocational Education. The Training Section of the Council of National Defense, before the establishment of the Training and Dilution Service in the Department of Labor, was the chief government agency encouraging and advising employers to establish vestibule schools. But it took the position that women should not be hired until all available men were put to work.² It did not, therefore, grapple with the problem of training women as a separate and distinct class. Nor did the Training and Dilution Service. The Railroad Administration limited its special training of women to those who were to work in ticket offices, etc. The work of the Federal Board of Vocational Education and of some of the technical schools and private industries had its inception in pre-war days, and was only modified or accelerated by war demand. A retrospect over the first nine months of 1918, however, when practically everyone was expecting the war to last well into the summer of 1919, and to require the extensive substitution of women, suggests the existence of a somewhat remarkable apathy with regard to the training of women for industrial life—an indifference in sharp contrast to the vigorous action taken by the British Ministry of Munitions.

On the other hand, the sporadic hysterics created by labor shortage and the desire to "do something quick" sometimes led to the establishment of training schools where they were not badly needed. Some firms, also, found in the war emergency an excuse for trying out experiments which they could not justify to their

¹ N.Y. State Industrial Commission, *op. cit.*, p. 20. See further, Turner, "Women in the Mechanical Trades in the United States," *Monthly Labor Review*, September, 1918, pp. 206-13; National Industrial Conference Board, *op. cit.*, pp. 45-47; Council of National Defense, *op. cit.*, pp. 37-39; Burdick, "Training of Girls and Women for Emergency War Work," *Vocational Summary*, August, 1918.

² *Second Annual Report of the Council of National Defense*, 1918, p. 86.

men in time of peace. The substitution of women appears not to have paralleled closely the general shortage of labor. At least one case is known in which men were locked out in order that women might be employed. In some sections in the interior where the labor shortage was not particularly acute, the amount of substitution is said to have approximated that in the eastern industrial centers.

Adaptation of work and working conditions.—Coincident with the training of women has been the adaptation of jobs to women. In this, also, the war merely accentuated a movement already clearly defined. Modifications of machinery to lighten the physical demands upon men as well as women have been going on for years. In America, unlike England, the war has introduced few big mechanical changes in behalf of women workers. Most firms in this country have limited themselves to such minor improvements as the installation of automatic air chucks, better safeguarding of machinery, etc.

The most striking technical change resulting from the substitution of women for men in English factories, namely, the widespread splitting up of jobs and replacement of the old skilled trades by series of repetitive processes worked out on automatic machines, found little counterpart in this country, for the reason that specialization had here already been carried to about the limit of practical efficiency and economy.

In this country the chief adaptations emphasized as necessary have not been in the technical processes of production, but in working conditions, terms of the employment contract, supervision, etc. English experience in hours of labor in relation to production, fatigue and health, in specialized supervision, and in welfare work, both inside and outside of the plant, had a marked effect upon theory, if not upon practice, in America. The conviction grew that before there was any great increase in the number of women employed the public should insist upon certain minimum standards with regard to hours, sanitation, protection to health, guarding against chronic fatigue, prohibition of unsuitable tasks, etc. As was natural, and as was the case in other phases of war activity, there were those who saw in the situation an opportunity to do a

good stroke for reform in the standards of employment. On the other hand, there were doubtless employers who saw only an opportunity to ignore standards already established and push their women employees to the limit while the golden opportunity for excess profits lasted. Either extreme would have been disastrous to the country's main object—to secure a sustained maximum production, and to win the war.

Had the federal government ever secured a co-ordinated labor administration, each government production bureau would have had a women's service branch, co-ordinated with a central women's service section in the Department of Labor.¹ The Ordnance Department was the only one, however, in which serious attention was given to the problem until the war was nearing an end. The Women's Branch of this department was established in January, 1918, to aid in securing women workers for ordnance production, to advise with contracting firms with regard to problems arising out of the introduction of women, and to develop and maintain, so far as possible, reasonable standards in working conditions. Later, in July, 1918, the Women in Industry Service was established in the Department of Labor. In December this Service published the "Standards Governing Employment of Women in Industry," above referred to. This pamphlet indicates briefly and broadly the more important factors in the adaptation of work and employment conditions to women.

The 8-hour day and 48-hour week are indicated as the maximum allowable. A half-holiday on Saturday, one day of rest in seven, at least three-quarters of an hour for a meal and 10-minute recesses "in the middle of each working period" are recommended.² No woman, it is held, should be employed between 10 P.M. and 6 A.M. Somewhat detailed recommendations are made with reference to welfare arrangements and working conditions. Special hazards to health which should be removed include:

¹ See Marshall, "The War-Labor Program and Its Administration," *Journal of Political Economy*, May, 1918.

² There appears to be a widespread opinion among American employers that rest periods are desirable for women but not necessary for men. See National Industrial Conference Board, *Rest Periods for Industrial Workers* (Research Report No. 13, January, 1919), pp. 7-9.

(a) constant standing or other posture causing physical strain; (b) repeated lifting of heavy weights or other abnormally fatiguing motions; (c) operation of mechanical devices requiring undue strength; (d) exposure to excessive heat or excessive cold, or to dust fumes, or other occupational poisons, without adequate safeguards against disease. Women are not to be employed in occupations involving the use of poisons (e.g., lead) which are proved to be more injurious to women than to men. Suitable uniforms are recommended. Home work is prohibited. These recommendations are all in line with English experience, but it is safe to say that most American establishments employing women come far short of meeting these standards.¹

While all these features received attention prior to the war, they became of special importance when the pressure of war orders encouraged a lowering of standards. In many states legal restriction on the employment of women are practically nil; in others they have been openly ignored. The Women in Industry Service found that special vigilance was necessary to uphold the legally established standards. The regulation of night work presented such difficulties that the Service called special conferences of representatives of labor and federal and state labor officials. A plan of control was finally developed whereby the federal government was given power, through a clause in all contracts, to prohibit night work by women on war contracts anywhere in the country.²

Problems of management.—Very important, also, both to sustained production and to the welfare of the women workers, were the new problems of shop organization, management, and discipline occasioned by the employment of women in processes to which they had hitherto been strangers.

The British Ministry of Munitions regarded problems of superintendence, especially in relation to welfare, as of so much importance that it established a special department to give effect to its policy—"to render to employers every assistance in devising schemes,

¹ Out of 106 firms, for instance, reporting on hours, only 20 had a 48-hour week or less, while 81 were working 50 hours or more. Of 127 firms reporting, only 20 were providing rest periods. National Industrial Conference Board, *Wartime Employment of Women in the Metal Trades*, pp. 62, 64.

² Cf. *Annual Report of the Secretary of Labor*, 1918, pp. 120, 121.

considering arrangements most suited to meet particular needs, and suggesting, if desired, the names of ladies qualified to act as welfare supervisors."¹

The functions of the "lady superintendent" in England coincide roughly with those of the woman welfare manager in this country—an official who is no new figure in the more progressive American firms, but whose importance was greatly increased by war demands. In the aggregate, however, a surprisingly small number of American firms appear to have grappled intelligently with the problem of supervision for women employees. Very few companies introducing women for the first time seem to have taken the trouble to appoint a trained woman employment manager—possibly because suitable appointees were so scarce, or, when a welfare secretary was appointed, to give her anything like the full powers and duties contemplated by the Munitions Ministry. Much stress is laid, in the English literature of employment management of women, upon the necessity of a full recognition of the psychology of the woman entering industry for the first time and the great desirability of employing women superintendents, instructors, etc., for women. As a rule, it is held, men are either too lenient or too stern in their treatment of women and too busy or too stupid to study their peculiarities.²

The Women in Industry Service laid down the following standards for employment management of women:

1. In establishing satisfactory relations between a company and its employees a personnel department is important, charged with responsibility

¹ *Munitions Ministry Circular No. 9*, January 31, 1916. (See *British Industrial Experience during the War*, I, 483-84; 65th Congress, *Senate Document No. 114*.) See also *U.S. Bureau of Labor Statistics, Bulletin No. 222*, p. 27. In a circular (*M.M. 13*) issued in September, 1916, the Ministry of Munitions described the duties of lady welfare supervisors. These include assisting in the engagement of women workers and the appointment of "overlookers," keeping records of broken time, investigation before dismissal and in cases of resignation, watching the wages of individual workers to guard against injustice, investigation of complaints, supervision of working conditions, especially sanitation, provision of seats, cloakroom facilities, etc., co-operation with doctors and nurses, organization of recreation, and supervision of housing and transit. The Ministry wisely recommended, however, that not all these duties should be laid upon the lady superintendent "directly she is appointed."

² Cf. Monkhouse, "The Employment of Women in Munitions Factories," *Scientific American*, Supplement, May 4, 1918, p. 282.

for selection, assignment, transfer, or withdrawal of workers and the establishment of proper working conditions.

2. Where women are employed, a competent woman should be appointed as employment executive with responsibility for conditions affecting women. Women should also be appointed in supervisory positions in the departments employing women.

It might be supposed that the question of discipline would assume serious dimensions where large numbers of men and women are employed together, but it appears to have occasioned little trouble. A slight difference in the time of reporting for work and quitting have ordinarily afforded sufficient precaution.¹ While the tendency of larger firms seems to be to segregate the sexes in separate departments it is doubtful if this is at all general. Women working in separate departments are in most cases reported as producing a greater output than men at the same work. On the other hand, it is argued that where men and women work together both are held to the same standard of workmanship and the tendency to make allowances for women because of their sex is minimized.²

Wages.—It is significant that persons who have been in most intimate touch with the war-time industrial employment of women, and at the same time whose training leads them to consider the broader economic and ethical aspects of the situation, point to the question of wages, and specifically to the issue involved in the principle of equal pay for equal work, as the fulcrum upon which the whole problem of woman's employment turns.³

The prevalent impression that the war has caused an immense improvement in wage rates for women will not bear the light of facts. Of the 117 plants studied by the New York State Industrial Commission, for instance, twenty-nine pay under \$12 per week, sixty-nine pay under \$14 per week, and only three pay over \$20

¹ The Detroit Executive's Club recommended separate entrances where possible. See "Detroit's Plan for Recruiting Women for Industries," *Industrial Management*, August, 1917.

² National Industrial Conference Board, *Wartime Employment of Women in the Metal Trades*, pp. 42, 43.

³ Cf., for example, the remarks of Mary Van Kleeck, Mary Anderson, Pauline Goldmark, Marguerite Bourat, and Helen Frazer, in *Proceedings of the Academy of Political Science in the City of New York*, February, 1919, pp. 141 ff.

per week. Only 29 per cent of the plants studied paid more than \$14 a week, in spite of the fact that in Schenectady the War Labor Board awarded a \$15-a-week minimum to General Electric women employees. Two-thirds of the women who replace men in the state of New York receive less than \$15 a week. Their wages hover around a mode of \$13 a week.¹ Another study by the same commission, covering 417 factories and 32,881 women in the paper-box, shirt and collar, confectionery, and cigar and tobacco industries, yields the following results:²

TABLE II
CUMULATIVE PERCENTAGE OF WOMEN IN FOUR INDUSTRIES WHO RECEIVED SPECIFIED EARNINGS

| Earnings per Week* | Paper Boxes | Shirts Collars | Confectionery | Cigars, etc. | Four Industries |
|---------------------|-------------|----------------|---------------|--------------|-----------------|
| Less than \$ 6..... | 8 | 11 | 17 | 5 | 10 |
| Less than \$ 8..... | 18 | 23 | 28 | 9 | 20 |
| Less than \$10..... | 36 | 33 | 51 | 17 | 35 |
| Less than \$12..... | 59 | 58 | 72 | 32 | 53 |
| Less than \$14..... | 77 | 72 | 85 | 46 | 68 |
| \$14 and over..... | 23 | 28 | 15 | 53 | 32 |
| \$20 and over..... | 2 | 5 | 2 | 21 | 8 |

* The figures were obtained for one week in November or December, 1918.

In 1914 the New York State Factory Investigating Commission decided that \$8 or \$9 was the lowest weekly wage on which a woman could support herself and maintain physical efficiency. Judged even by this pre-war standard it appears that one-fifth of the women in the four industries studied were not earning enough to support themselves decently in an up-state city. Wages even in these overcrowded industries have risen since 1914, when from one-third to four-fifths of the women were earning less than \$8 a week, but on the conservative estimate that the cost of living has risen at least 50 per cent, half of the women in the above four industries were getting less than a living wage.³ A recent, but unfortunately undated, study of New York City laundries states that the wages of women in this notoriously underpaid industry

¹ *The Industrial Replacement of Men by Women in the State of New York*, pp. 22, 23.

² *Monthly Labor Review*, March, 1919, p. 212.

³ Cf. *Monthly Labor Review*, March, 1919, pp. 212-14.

averaged from \$6.27 for shakers to \$10.52 for markers and sorters.¹

The average weekly minimum paid by 22 industrial concerns in Cincinnati is placed at \$8.24.² These figures are indicative of the rates which would be found generally in industries not stimulated by war demand. In war industries somewhat higher rates have prevailed. The average weekly earnings of women in the shoe industry, for example, in the early part of 1918 ranged from \$10.81 to \$13.51.³ Women in the Philadelphia Naval Aircraft Factory, a government plant, were more highly remunerated. Only 22.9 per cent earned less than \$20, 57.9 per cent between \$20 and \$22, 19.2 per cent between \$26 and \$29.⁴ Women making uniforms for the Navy earned from \$10 to \$35 a week.⁵

If the scattering investigations which have been made are a safe guide, it is certain that, outside of government plants and the relatively few cases where the War Labor Board or other agencies forced employers to raise wages, even the pressure of war demand for labor failed to bring the wages of a vast number of women up to the level necessary to "maintain the worker in health and reasonable comfort."

That other ideal of justice sponsored, in theory at least, by the National War Labor Board—equal pay for equal work—does not appear to have appealed to more than a limited percentage of employers. Where women have taken men's places it has in the majority of cases been at a lower time rate, and not infrequently at a lower piece rate. Forty-six metal-working concerns reported time rates for men and women equal, 39 reported women's rates

¹ Harris and Swartz, *The Cost of Clean Clothes in Terms of Health, a Study of Laundries and Laundry-workers in New York City*, under the auspices of the Bureau of Preventable Disease of the Department of Health and the Consumers' League of New York City, pp. 28, 29.

² Mann, *Women Workers in Factories* (Consumers' League of Cincinnati, August, 1918), p. 17. No specific date for the investigation is given. The figures presumably relate to the first half of 1918.

³ *Monthly Labor Review*, April, 1919, pp. 174-75.

⁴ Council of National Defense, *Women Workers in the Philadelphia Naval Aircraft Factory*, p. 43. The figures are for July, 1918.

⁵ Council of National Defense, *Making Uniforms for the Navy*, September, 1918, pp. 41-43.

less than men's.¹ In Cincinnati, "as far as could be learned, most concerns pay women from 2 to 9 cents an hour less than they formerly paid men for work which is virtually the same as that performed by men."² Striking facts are reported in New York state:

Of 78 plants offering the comparative wages of men and women on the same work, 16, or 20 per cent, pay women the same rate paid the men whom they replace. Of all women replacing men 9 per cent receive equal pay. It is to be noted, however, that the higher the pay of the man replaced the smaller the chance of the woman replacing him to receive it. The highest paid men received \$22, \$24, \$28, \$34.50, and \$35 a week. The women who took their places did so at a reduction of \$10, \$12, \$17.70, \$19.50, and \$14.88 a week, respectively. The majority of men replaced at equal wages received between \$12 and \$15 a week, a wage which is an extremely low wage for men, but approaches the average wage paid to women throughout the State and is less than it costs a woman supporting no one but herself to live.³

Of 1,013 women whose output was reported greater than that of men they replaced, 10 received 48.8 per cent of the wage paid to the men, 750 received 75.4 per cent, 28 received 81.2 per cent, etc. "*In no case does a woman producing more than a man receive as much as a man doing the same work in the same plant.*" Statistics for 767 women producing less than men show that their wages are no lower than those of their sisters who produce more. The wage-rate of the woman does not vary with her production.⁴ In Minneapolis, of 647 women replacing men, 154, or 23.6 per cent, received equal pay; 342, or 52.8 per cent, received lower pay than the men they replaced, and 73, or 11.2 per cent, higher pay.⁵

Employers, confronted with an audacious government board setting up equal pay as a standard of justice, and by a public opinion less and less disposed to question either the logic or the ethics of equal pay, found themselves in a position where they had

¹ National Industrial Conference Board, *op. cit.*, pp. 8-29. The data are of doubtful value.

² Mann, *Women Workers in Factories*, p. 16.

³ New York State Industrial Commission, *The Industrial Replacement of Men by Women*, p. 23.

⁴ *Ibid.*, pp. 28, 29.

⁵ Woman's Occupational Bureau, *War-time Replacement in the City of Minneapolis*, April, 1919, pp. 12-14.

either to equalize the wages of men and women performing substantially the same work, openly ignore the trend of opinion, or seek plausible excuses. Apparently a great proportion of firms preferred the second alternative. In general, where any justification has been offered, the contention has been that even though women's production might equal or excel that of men, changes in machinery, in routing, in amount of assistance and supervision necessary, so increased production costs that wage reduction was necessary. In so far as women's work does fall short of men's, or as the changes necessitated are really significant, such contentions stand, fair and legitimate. But unbiased workers in the field—government examiners, etc.—reply with the following arguments: (1) Very few changes of equipment have been actually made in this country, and those were minor and inexpensive. (2) Where more expensive changes have been made, they are such improvements as a progressive and farsighted manufacturer would make under any circumstances, and represent a net economy through the more effective utilization of machinery. (3) The same holds true in regard to the employment of helpers to lift heavy weights. There is no saving in permitting skilled or semiskilled workers to perform what common labor is perfectly capable of doing. (4) The need of supervision is no greater than if an equal number of untrained men were taken on. It is unfair to make the comparison between skilled mechanics and inexperienced workers and charge the difference up against sex.

Several government agencies have more or less consistently upheld the principle of equal pay for equal work. The Department of Labor, through the Women in Industry Service, is committed to the following ruling:

Women doing the same work as men shall receive the same wages, with such proportionate increases as the men are receiving in the same industry. Slight changes made in the process or in the arrangement of work should not be regarded as justifying a lower wage for a woman than for a man unless statistics of production show that the output for the job in question is less when women are employed than when men are employed. If a difference in output is demonstrated the difference in the wage-rate should be

based upon the difference in production for the job as a whole and not determined arbitrarily.¹

The National War Labor Board recognized the necessity of meeting the problem with a carefully formulated policy. In its original statement of principles it embodied the following sweeping provision:

If it shall become necessary to employ women on work ordinarily performed by men, they must be allowed equal pay for equal work and must not be allotted tasks disproportionate to their strength. There are three reasons for the first part of this provision: First, justice requires that payment be made according to service; second, the evidence shows that the woman who is being drawn into industry because of the war is in a large proportion of cases actually taking the place of some man in the support or partial support of the family, and a decrease in her wages means a decrease in the family's standard of living; third, it is not economically sound or socially desirable that women should be brought into industry at a faster rate or in greater numbers than the needs of production actually demand, and the only effective check is to make it no more profitable to employ women than men.²

The claim of abstract justice seems to offer little room for question. The second reason, however, that women must provide for dependents, represents a newer idea, and one more likely to be contested.³

The final reason adduced, the check on induction of woman into industry, has apparently not received much consideration by those men workers who oppose the equal wage. Not only is the equal wage a stabilizing force, but also it is the only certain means, in many industries, of preventing the employment of a lower-paid group, the women, to the exclusion of the men.

¹ *Standards Governing Employment of Women in Industry*, p. 4.

² *Monthly Labor Review*, November, 1918, p. 183.

³ The Women in Industry Service included a provision based upon this idea in its "Standards":

"The minimum wage rate (for women) should cover the cost of living for dependents and not merely for the individual." It is probable that this is the substance of things hoped for rather than anything the Director of the Service expects to see soon put in practice.

The War Labor Board in general set the minimum wage for men at 40 or 42 cents an hour.¹

Notwithstanding the fact that this minimum was based on a physical subsistence level and was estimated to come far short of giving any meaning to the "comfort" part of the Board's principle, the Board made several awards setting a still lower minimum for women—usually 30 or 32 cents an hour.² This was done, it is explained, "partly to avoid too great a disturbance within the industry, and partly because the women referred to were doing a lower grade of work than any of the men." This second reason was logical enough from the standpoint of equal pay for equal work, but entirely illogical from the standpoint of a living wage, the principle of which, if it means anything, should mean that the worker is entitled to a living wage no matter how low the grade of calling she may be engaged in. In its award in the case of the Corn Products Refining Company (Docket No. 130) the Board reached a more logical basis for fixing minimum wages:

Instead of recognizing the old standard that women should be paid a lower minimum than men for work not usually done by men, the Board definitely takes the position that wages should be fixed solely on the basis of the difficulty of the work required to be performed and the degree of responsibility which workers are expected to assume.³

Could this principle, along with Miss Van Kleeck's dictum that the cost of living of dependents should be included in the wages of women, be applied in practice, the great battle for economic justice to women in industry would be won, at the same time that men workers' fear of cut-throat competition would be removed.

¹ Acting on the advice of Professor W. F. Ogburn, employed as a cost of living expert to the Board, Mr. Frank Walsh, before resigning the joint chairmanship in November, 1918, offered a resolution that the minimum wage for all unskilled male adult labor be placed at 72½ cents an hour—the level designated by Professor Ogburn as necessary if the Board's principle as to maintenance of the worker and his family in health and reasonable *comfort* were to be lived up to. The Board voted the resolution down. (See John A. Fitch, "The War Labor Board," *Survey*, May 3, 1919, pp. 192-95.)

² Cf. "Federal Policy in the Employment of Women," *Monthly Labor Review*, November, 1918, p. 185.

³ *Monthly Labor Review*, January, 1919, p. 31.

The Railroad Administration has been remarkably consistent in upholding the principle of equal pay for equal work.¹ Women were first engaged on the railroads in the summer of 1918, before government control began. They were hired because they could be had for less than men. Women were hired for common labor at 20 to 22 cents an hour, when men were being paid 28 to 30 cents for the same kind of work.² The Railroad Administration put an end to this exploitation in General Order No. 27, which prescribed that the pay of women "where they do the same class of work as men, shall be the same as that of men."³

Though the government may issue "Standards" and "Principles" and even legislate, its greatest contribution necessarily has been, and will be, the development of a strong and enlightened public opinion in a matter in which tradition, custom, pecuniary interest, and sex prejudice all conspire to produce a conservative adhesion to injustice and to make evasion of the new standards easy. The very fact that we have thus far failed to secure scientifically accurate studies of the relative output of men and women will make for continued evasion, because of the ease with which unscrupulous employers can misrepresent women's efficiency. Changing a job slightly is a simple and common subterfuge; and others are frequently practiced. Where, as in England, there is a widespread change in manufacturing processes, through the splitting up and *morcellement* of jobs, the principle of equal pay will have still greater difficulty of practical application.

Attitude of men.—Some of the most difficult problems have arisen as an immediate result of the attitude assumed by the men workers toward women. Individual workers, at least where jobs were plentiful, have been less antagonistic than has organized labor. In fact, during the war a surprising degree of harmony has been reported in many quarters. Especially has this been true where men have been graded up and not made to feel that they were being

¹ The Shipping Board also adopted the principle in theory but had little occasion to test it in practice.

² Goldmark, "Women in the Railroad Service," *Proceedings of the Academy of Political Science in the City of New York*, February, 1919, p. 18.

³ *Annual Report of the Director General*, preliminary edition of chapter on labor, 1919, p. 10.

crowded out of their jobs by women. As the labor demand falls off and the supply increases, a more definite opposition to women is to be expected.

Where men have been organized, opposition has been a more frequent, though by no means customary, state of affairs.

The antagonism has been most strikingly exemplified in the case of the Cleveland street-car workers. In this case women were admitted to service on the lines with no arrangement, at least so far as they understood, that this was an emergency measure. The men in the company's employ objected on the ground that the labor shortage did not justify the introduction of women, and agreed with the company to submit their objections to the National War Labor Board. In order the more vigorously to press their point the men struck, and the mayor of Cleveland brought pressure to bear on the mediating body. Although the only point submitted was the urgency of the company's labor needs, the Board decided not only that the labor scarcity was not sufficient to merit the introduction, but also that the women should be dismissed January 1, 1919. As a matter of fact, the company was unable to secure enough men of the proper caliber, and after meeting for consultation with the city council and the street-car men's union, brought about an agreement permitting women to remain at work until March 1.

About 150 women were employed by the company. In all the earlier proceedings they had no voice, but, backed vigorously by women's organizations throughout the country, they caused the case to be resubmitted to the War Labor Board.¹ The Board, however, was slow in acting, and March 1 had rolled around and the women had been discharged before the Board, on March 17, handed down its award, stating that an injustice had been done the women and directing that the "sixty-four women heretofore discharged by the company be reinstated to their employment." The company refused to do so, however, on the ground that it could not risk another strike.

The original decision was made in the absence of both Mr. Taft and Mr. Walsh. It is an illuminating illustration of the influence of special interest. The representatives of organized labor on the

Board voted for the dismissal of the women in the face of the stated principles of the Board, and of the facts that the street-car union in Cleveland would not admit the women to membership, and that the women had no one to represent them either on or before the Board. It is illustrative of the fact also that the rights of women are always in jeopardy unless women have adequate representation. The War Labor Board had no woman member.¹

A case similar to that in Cleveland, except that the women had been granted permits by the union, arose in Detroit. The War Labor Board in this case decided that the women already employed as conductors in Detroit should be retained, that those who had prepared themselves for the work should be received into the service, but that thereafter no more women should be employed.²

That these street-car cases do not represent the whole trend of union thought is evidenced by the Pacific Coast telephone dispute, adjusted through the President's Mediation Commission in 1917. In this dispute, involving 3,200 men and 9,000 girl operators, "the recognition of the girls' union became the burning issue." The men, thoroughly organized, and for the time being in a favorable position because of the extraordinary demand for electricians, made the recognition of the girls' union their controlling principle.³ The spectacular strike of the New England telephone girls in April, 1919, and their support by the 12,000 "inside" men for the preservation of the principle of collective bargaining, is another conspicuous example both of the ability of even young girls to effect unified action and of the support which may be looked for from the more intelligent men's unions.⁴ Perhaps also it is an indication that a feeling of solidarity is crossing sex lines and deepening itself in a class hitherto supposedly lacking in it—the women.

Resolutions passed at several state labor conventions in the first half of 1919 also indicate that organized labor, theoretically

¹ For a history of the case see *Monthly Labor Review*, January, 1919, pp. 224-30, and May, 1919, pp. 230-32.

² *Survey*, March 1, 1919, p. 801.

³ Secretary of Labor, *Sixth Annual Report*, 1918, p. 18.

⁴ Withington, "The Telephone Strike," *Survey*, April 26, 1919, p. 146.

at least, sees the logic of a square deal for women in opportunity for employment at equal pay for equal work. The practical absence of immigration will for a time reduce the pressure to drive women out of their new positions, but the development of a surplus labor supply would bring the issue to a head. The unions will either accede to the ousting of the women or insist upon their organization. In the latter event the principle of equal pay will be rendered, perforce, something more than lip service on the part of organized labor in general.

The future.—It is too soon to say what or how much effect the war will have had on the status of women in industry. The changes abroad will no doubt be profound, but in this country, where, as we have seen, the number of women brought into industry by war demand was not great, it would be easy to overestimate both the new economic opportunities opened to women and the change in public sentiment with regard to woman's "proper sphere." It is difficult, for instance, to estimate the degree of real sincerity in the conventional encomiums on woman's war work. The various uniformed corps of society women and the bloomed munitions worker have had a somewhat romantic appeal to the public mind; but just how much this appeal will have accomplished toward securing equal opportunity and a square deal for working women is a matter of doubt. "It is quite absurd," says one speaker, "to expect women who have made the astounding discovery that they can actually work at a wage of \$20 to \$40 a week gracefully to return to paper-box or laundry trades or department stores for \$7, \$8, or \$12 a week."¹ It might be difficult to find many women who have made such a fortunate change of employment, but even if their number were legion there is no guaranty that they may not have to go back to essentially the old conditions. The idea that the war will bring about automatic transformations in employment and permanent wage scales will not bear analysis.

If women are to make good the war's promise of a new and higher industrial status, they will have to make themselves as valuable to the employer as the available men. More than that,

¹ Mary E. Drier, in *Proceedings of the Academy of Political Science in the City of New York*, February, 1919, p. 6.

they will have to convince the employer that they *are* as valuable. And still more, they will have to convince him that they *know* their value and intend to be paid for it. This means that they will have to fight down the age-old tradition, so deeply inrooted in the male mind, that women should not be paid more than two-thirds the rate for men, even for equal or superior work.

No amount of legislation will do this. Nor will too constant reiteration that women must be regarded primarily as women—the biological vessel for the perpetuation of the race. Some special standards for their employment must doubtless be enforced, in the interest both of efficiency and health, but in the long run it will probably be found that regulations conducive to the health and efficiency of women would do no harm to either if applied to men as well. The one big exception to this generalization, if women are to become industrial workers on a plane of efficiency and experience—based on length of service—comparable to that of men, is the necessity that women be granted maternity leave. The fight first staged with the New York City school board will have to be fought over again throughout the industrial field.

To put teeth into the equal-pay-for-equal-work principle, women will have to secure industrial training. Does the movement for factory vestibule schools hold out hope of this? Does the distribution of federal funds under the Smith-Hughes Act indicate that vocational educators will take cognizance of women's need of industrial—as well as home-economics—training? We cannot say. But we have a legitimate doubt. Furthermore, women will have to learn to organize and to stay organized, with or without the help of the men. It is questionable how much aid they can look for from the old unions in the American Federation of Labor, except to the extent that attempts to use women to break down men's wages arouse the unions to a greater sense of labor solidarity. Even if industrial unionism gains the field, women will still need their own organizations. To this end a heavy responsibility as well as a magnificent opportunity rests upon organizations like the Women's Trade Union League. Moreover women must have adequate representation on all labor-adjustment boards, federal or other, and upon all works committees and industrial

councils which shall be formed in plants or industries employing women.

Neither training nor organization, however, will accomplish equal pay for equal work if immigration bars are let down. For a few years, indeed, women, as well as men, will be comparatively free of the depressive influence of immigrant competition; they should make the most of this opportunity to put reality into the notion of a living wage and to abolish the subsidization of the consumer by the worker. To the end of protecting wage and work standards from cut-throat immigrant competition, the ballot will be a useful weapon in women's hands, but it will have to be used with knowledge and understanding of hard facts and not with too much feminine sensitiveness as to the incidental hardships involved in immigration restriction or exclusion. The ballot, however, will prove ineffective in the absence of organization and without the development of a unified social and industrial consciousness in the woman population as a whole. In brief, the future industrial position of women depends little upon the direct industrial changes occasioned by the war; much upon the outflow of rational and moral currents which will constitute the deeper part of economic reconstruction.

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